

REMARKS

Claims 1-8 are pending in the application. These claims were rejected as follows:

Claims / Section	35 U.S.C. Sec.	References / Notes
1-3 & 5-8	§103(a) Obviousness	<ul style="list-style-type: none">◦ Cecil (U.S. Patent No. 4,991,193); and◦ Ono (U.S. Patent No. 6,088,425).
4	§103(a) Obviousness	<ul style="list-style-type: none">◦ Cecil (U.S. Patent No. 4,991,193);◦ Ono (U.S. Patent No. 6,088,425); and◦ POLYDOROS.

5 Applicants thank the Examiner for withdrawing the 35 U.S.C. §102 rejection from the application in response to the Applicants' arguments.

Applicants have provided discussion below for distinguishing the present invention from the art cited against it. Applicants' use of reference characters below is for illustrative purposes only and is not intended to be limiting in nature
10 unless explicitly indicated.

35 U.S.C. §103(a), CLAIMS 1-3 AND 5-8 OBVIOUSNESS OVER ONO IN VIEW OF CECIL

1. *It would not be obvious to combine Ono, which teaches the use of an X-ray apparatus in the context of a CT scanner that automatically takes successive X-Ray images for several tens of seconds, with Cecil to arrive at the present invention, namely the use of an override control element to unblock the X-Ray source when it is blocked.*
15

In the OA, on pp. 2-3, the Examiner indicates that Ono discloses all elements of claim 1 of the present invention except that Ono does not specifically

disclose a control device for unblocking the X-ray source when it is blocked, and thus, there is no integrated break-time key disclosed.

The Examiner then notes that:

5 Cecil teaches a break-time key 72 for an X-ray unit controller that is initiated to override a display timer (62, 64 and/or 66) that is integrated with the break-time key (via touchscreen 24, Fig. 2) where the display timer is related to blocking the X-ray unit. This allows the operator to continue X-ray imaging even
10 though the X-ray source has reached a thermal loading limit (col.3, lines 15-20; col. 5, lines 8-23, 37-40, 51-67). Such a break-time key is essential in a life-threatening situation where a doctor needs the results fast in order to take the necessary measures
15 to keep the patient alive (col. 1, lines 54-59; col.3, lines 45-55).

The Examiner then indicates that it would have been obvious to one of ordinary skill in the art at the time the invention was made for Ono to have a break-time key in order to unblock the X-ray source for the purpose of expediting
20 the diagnostic imaging process in emergency situations, as taught by Cecil.

Applicants respectfully disagree with the Examiner that it would have been obvious to combine the teachings of Ono and Cecil to arrive at the present invention.

As noted in MPEP §2143, in order to establish a *prima facie* case of
25 obviousness, one of the criteria is that there must be some suggestion or motivation to modify the reference or to combine the teaching. MPEP §2143.01(III) identifies that the mere fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness unless the prior art also suggests the desirability of the combination.

The Ono reference, added by the Examiner in combination with Cecil, relates to an X-ray source used in the context of a CT-Scanner. In this context, it would make no sense to provide a control device for unblocking the X-ray source when it is blocked.

5 Unlike a conventional X-ray, the CT-Scan is generated by a complex sequence of X-ray photographs from different viewing angles. As noted on Ono:

10 [T]he operation for successively taking tomograms of a to-be-photographed object in a helical scanning mode for several tens of seconds, for example, is applied. [2/1-4]

Although the need to have an automatic blocking upon reaching a thermal loading limit would clearly be required in such an automated CT-Scan that takes multiple successive images, contrary to the Examiner's assertion, it would not be obvious to one of ordinary skill in the art for Ono to have a break-time key in
15 order to unblock the X-Ray source for the purpose of expediting the diagnostic imaging process in emergency situations, as taught by Cecil.

Since the CT-Scan requires the automated taking of multiple successive images over the course of several tens of seconds, such a break key would be too complex for an operator to use and would make demands on an operator to
20 ensure safe and cost-effective operation (i.e., without damaging the machine). The automated and sequential nature of the X-Ray imaging would mean a constant monitoring of the machine, the temperature, the sequencing, etc. while the break key is engaged—the operator would be forced not only to contend with the overriding of a single imaging, but of multiple sequential imagings. In sum,
25 the inclusion of a break key on Ono would result in a system that is unwelidy and

overly complex to operate, thereby rendering such a break key inoperative in its implementation in a CT-Scanner, as taught by Ono.

Furthermore, there is no teaching or suggestion in either Cecil or Ono that would suggest overriding a temperature-based blocking in such an automated
5 system as that proposed by Ono.

2. Cecil fails to teach or suggest that the display and control element are integrated in a common break-time key.

In the OA, on pp. 2-3, the Examiner states that Cecil teaches a break-time key 72 for an X-ray unit controller that is initiated to override a display timer (62,
10 64 and/or 66) that is integrated with the break-time key (via touchscreen 24, Fig. 2) where the display timer is related to blocking the X-ray unit.

The Examiner further states, on p. 3 of the OA, that Cecil specifically teaches a break-time key 72 integrated with a timer display 66 (all part of touchscreen 24).

15 Applicants respectfully disagree with this characterization of the teaching of Cecil. Cecil confusingly identifies, in Fig. 1, two separate, non-integrated components by element 24. It is clear that these are separate because Cecil refers to "The man-readable displays 24..." in plural form. However, Cecil is clear that whenever it is talking about the smaller of the displays to relate to
20 some form of it being "touch sensitive" (see, e.g., 6/2-3 in referring to the override control 72 being located in a touch sensitive area on the screen 24). There is no such designation associated with the display timer—it is only mentioned that the display 66 may be provided on the console for counting down the seconds.(5/59-

61). Since there is no reference of the "touch sensitive" area or screen with regard to the display 66, and furthermore, since it refers to the display being provided on a "console" (which would normally be associated with the larger and separate non-integrated entity), there is no teaching or suggestion that the display and the control element are integrated in a common break-time key.

However, even if *arguendo* both the key 72 and the display 66 were both located on the touch screen portion of the displays 24, that is not sufficient to meet the claim element. The claim element requires that the display and the control element be integrated *in* a common break-time key. This would either require that the entire touch screen portion be the key 72 (clearly not what is shown in Fig. 1 of Cecil) or that the display text be located within the key 72. Again, there is no teaching or suggestion that this is the case.

35 U.S.C. §103(a), CLAIM 4 OBVIOUSNESS OVER CECIL IN VIEW OF POLYDOROS

3. *Applicants rely on the above arguments related to the independent claims and assert that the addition of POLYDOROS in combination with Cecil fails to teach or suggest the elements of the independent claims.*

In the OA, on p. 4, the Examiner added the POLYDOROS reference as disclosing the element of dependant claim 4 related to displaying a value as a percentage.

Without addressing this argument on the merits, Applicants rely on the previously provided arguments and assert that POLYDOROS in combination with Cecil fails to teach or suggest the elements of the independent claims.

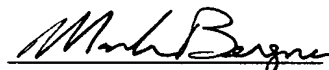
For these reasons, the Applicants assert that the amended claim language clearly distinguishes over the prior art, and respectfully request that the Examiner withdraw the §103(a) rejection from the present application.

CONCLUSION

5 Inasmuch as each of the objections have been overcome by the remarks above, and all of the Examiner's suggestions and requirements have been satisfied, it is respectfully requested that the present application be reconsidered, the rejections be withdrawn and that a timely Notice of Allowance be issued in this case.

10

Respectfully submitted,

 (Reg. No. 45,877)

Mark Bergner
SCHIFF HARDIN, LLP
PATENT DEPARTMENT
6600 Sears Tower
Chicago, Illinois 60606-6473
(312) 258-5779
Attorney for Applicants
Customer Number 26574

15

20

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to:
25 Mail Stop Amendment, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450 on February 27, 2006.



30